

Multi-Channel CWDM Mux/Demux 20 nm Spacing



LGX Cassette

Key Features

- Extended temperature range
- Flat and wide passband
- High demux channel isolation
- Low insertion loss



Flat Box

JDSU Coarse Wavelength Division Multiplexers (CWDMs) are manufactured using laser weld technology to exceed Telcordia GR-1221 requirements. They demonstrate low loss and reliable performance over an extended temperature range.

These devices show broad passbands and high isolation, making them ideal for operation with inexpensive, uncooled lasers. They feature up to 16 low dispersion channels, thereby enabling high capacity, low cost products for the CATV and metro/access markets.

Easily customizable, JDSU CWDMs can be configured from a standard list of packaging and connector options.

Applications

- Metro optical networks
- Access optical networks
- Enterprise networks

Compliance

- Telcordia GR-1209 and 1221 qualified

2

Specifications

Parameter		4 Channel	8 Channel
Operating wavelength range		1300 to 1620 nm	
Wavelength centers (ITU wavelengths)		1470nm, 1490nm, 1510nm, 1530nm, 1550nm, 1570nm, 1590nm, 1610nm	
Wavelength centers (ITU+1 wavelengths)		1471nm, 1491nm, 1511nm, 1531nm, 1551nm, 1571nm, 1591nm, 1611nm	
Passband	Minimum	$\lambda_c \pm 6.5$ nm	
Passband ripple	Maximum	0.35 dB	
Insertion loss ¹			
Demultiplexer module	Maximum	2.0 dB	3.2 dB
Multiplexer module	Maximum	1.7 dB	2.9 dB
Isolation (adjacent channel)			
Demultiplexer module	Minimum	30 dB	
Multiplexer module	Minimum	15 dB	
Isolation (non-adjacent channel)			
Demultiplexer module	Minimum	50 dB	
Multiplexer module	Minimum	15 dB	
Directivity	Minimum	50 dB	
Return loss	Minimum	45 dB	
Polarization dependent loss	Maximum	0.2 dB	
Polarization mode dispersion	Maximum	0.2 ps	
Operating temperature range		-40 to 75 °C	
Storage temperature range		-40 to 85 °C	
Fiber type		SMF-28 or equivalent (900 μ m, 1.6 mm, 2.0 mm, 3.0 mm)	
Pigtail length (for flat box only)		1.0 $\pm$ 0.1 m	
Package dimensions			
LGX cassette (W x D x H)		6.35" x 5.10" x 1.15"	6.35" x 5.10" x 2.28"
Flat box (W x D x H)		125.7 x 93.0 x 9.9 mm	125.7 x 93.0 x 9.9 mm

1. Losses include one connector. If no connector option is selected, the maximum loss should be 0.2 dB lower.

Ordering Information

For more information on this or other products and their availability, please contact your local JDSU account manager or JDSU directly at 1-800-498-JDSU (5378) in North America and +800-5378-JDSU worldwide or via e-mail at customer.service@jdsu.com.

Sample: FWM-T80D7F094

FWM-T

Code	Number of Channels
4	4 channels
8	8 channels

Code	Channel Plan
0	ITU channels
1	ITU+1 channels

Code	Device Type
D	Demux
M	Mux

Code	Channels
7	Starts at 147x ¹
9	Starts at 149x
1	Starts at 151x
3	Starts at 153x
5	Starts at 155x

Code	Package
F09	Flat box, 900 µm fiber
F16	Flat box, 1.6 mm fiber
F20	Flat box, 2.0 mm fiber
F30	Flat box, 3.0 mm fiber
LGX	LGX cassette

Code	Connector Type
0	None
2	FC/SPC
3	FC/APC
4	SC/SPC
5	SC/APC
6	LC/UPC
7	LC/APC

1. Default for 8 channel.

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